

Washington Park Arboretum

BULLETIN



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The Washington Park Arboretum is managed cooperatively by the University of Washington Botanic Gardens and Seattle Parks and Recreation; the Arboretum Foundation is its major support organization.

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ABOVE: Southern globethistle (*Echinops ritro*) flowering behind the Big Greenhouse in late July. (Photo by Niall Dunne)

ON THE COVER: Oakleaf hydrangea (*Hydrangea quercifolia*) blooming in the Woodland Garden in mid-July.
(Photo by Niall Dunne)

Passages

We all love this “Bulletin.” It is one of the few left of its kind: a carefully documented quarterly, with articles by some of our region’s best horticultural writers on topics of interest to gardeners and environmentalists in the Pacific Northwest. It is beautifully written and presented. For the past 17 years, its designer has been Constance Bollen—“CB” to all of us who have had the privilege to work with her.

CB is retiring, and this is her last issue. She began designing this magazine in support of then “Bulletin” Editor Lee Neff, continued through the tenures of the late Jan Whitner, and now our own Niall Dunne. Along the way, she greatly enhanced the look and feel of the magazine, and she also upgraded the design software used to make it—simplifying the whole process for all of us. Her passion for gardening and horticulture has shown through in her work for us, and for other publications—including our display garden brochures. She has been a pure delight to work with. Thank you, CB, for all that you have done for us.

This is not only CB’s last “Bulletin,” it is also mine. I have loved my mission here to sustain this special community of members and volunteers, and to help to complete as much of the Master Plan as possible. Together, we at the Foundation—along with our partners at the City and the University—have made a lot happen during my time here: including much of the Pacific Connections Garden, the Garden Stewards program, the Loop Trail, the Japanese Garden Entry Gatehouse, and the Azalea Way Centennial Garden currently under construction.

But I have a new mission now: to complete the research, navigate the regulatory path, and bring to market a revolutionary treatment for late-stage cancers. It is a patented process discovered by my husband, Biff, and his research partner, Dennis. Starting later this summer, Biff and I will hop into my little orange Subaru and take a road trip through the canyon lands of the Southwest to

his condo in the Garden District of New Orleans. I will be spending almost all of my time for the next couple of years in Louisiana as the full-time president of our company—pouring all of my passion, tenacity and drive into my new mission. I am so looking forward to being with Biff and working with him and our company to cure late-stage cancers.

Writing this quarterly letter has been a favorite part of my job. It has been fun to note the passing seasons and the work here, and to tell stories about the important members of our community and their contributions to the Arboretum. I shall miss my chance to write to you, and I shall miss being part of this community. Thank you for the opportunity to serve here for the past 10 years. I wish you all the very best. ~

Fondly,



Paige Miller, Executive Director,
Arboretum Foundation





Evolution of a Summer-Dry Garden

BY PHIL WOOD

You have heard what they say about Seattle: It rains all the time. Yet we who garden in the Northwest know all about the long, dry summer and the horticultural challenge it presents. Without copious irrigation, many traditional garden plants from areas with summer rain—including Asia and the East Coast of the U.S.—do not do their best here. There is an alternative approach to using these plants, promoted by advocates of sustainable gardening: Choose species and varieties that can handle our wet winters and springs, while also thriving in our dry summers.

Shelagh Tucker chose the climate-suitable alternative when she replaced her thirsty front lawn near Carkeek Park in north Seattle with a new garden in 2003, a time when water bills were spiking. She called me to work on the re-design. “I don’t want to water anymore,” she said. “Let’s talk about a Mediterranean garden,” she said.

The front yard looked enormous to both of us. It measured 75 by 55 feet and sloped from the house to the street, with nothing to give it scale but brown lawn. The new design included a 20-foot-diameter, circular stone terrace that created a level area in the center of the slope. A

ABOVE: Low-water-use plants frame Shelagh Tucker’s Seattle home. (Photo by Phil Wood)

series of new stairs connected the front door to the street. Shelagh chose buff-colored gravel for informal paths that knitted planting bed islands together. Natural rock was chosen to complement the rustic stone walls and paving. Rock Solid Landscapes, the landscape contractor, did a careful job on the construction.

Experimenting With Plants

Shelagh put together the original plant list, but like many gardens, hers has developed over time through a process of trial and error. One source of botanical inspiration has been Beth Chatto, the British plantswoman and author, whose famous gravel garden features plants that do well in poor soil with no irrigation. Shelagh has also been inspired by art—she herself is a skilled painter and brings a trained eye to her garden, which looks good in all seasons. Even on a gray

winter day, contrasts of foliage color, texture and shape provide stunning combinations.

Shelagh found her sunny, open, south-facing slope perfect for summer-dry plants. “Summer-dry” is the term she uses now to describe her garden, rather than “Mediterranean.” After more than a decade of experimentation, she feels that many plants from the Mediterranean don’t like our colder winters. Also, focusing on “summer dry” plants has made a lot more available. Besides the Mediterranean, there are four other major wet-winter/summer-dry regions of the world: the West Coast of North America, western Chile, Southwest Australia and South Africa. Seattle gardeners can turn to all of them for potential plant choices.

Soil preparation for the new garden included tilling coarse gravel (5/8-inch minus crushed rock) into the loamy soil to create good drainage.

A circular stone terrace creates a level space in the sloping yard. The low stone walls also serve as benches. (Photo by Phil Wood)





ABOVE: French lavender (left) and a *Cytisus 'Zealandia'* (right), a well-behaved broom, add color to the garden.
(Photos by Daniel Mount)

Soggy soil is the enemy, but cold temperature is also a consideration. Seattle is at the northernmost tip of the West Coast's summer-dry range. Moreover, at 300 feet above sea level, Shelagh's garden is cooler in the winter than gardens in many other parts of Seattle. The plants that she trials must run the gauntlet of dry summers and wet, cold winters.

When she was establishing the garden, Shelagh provided irrigation for the new plantings during their first year, and she does the same today for any new additions. She continues to experiment and suggests trying the same plant in three different locations in your garden in order to find its most suitable microclimate. She shares her knowledge generously, offering opportunities for groups to visit. Visitors this year include the Northwest Perennial Alliance Open Gardens program and the Northwest Horticulture Society Meet the Board Tour.

Successful Selections

In Shelagh's planting plan, trees bring height to the design. Shelagh chose four Japanese snowbell trees (*Styrax japonicus*) to create a semicircle around the terrace. A crape myrtle (*Lagerstroemia*

indica 'Tuscarora') reaches 25 feet. Crape myrtles need heat to bloom; Shelagh located hers next to her driveway, which provides enough radiant energy for the plant to bloom nearly every year. An eastern redbud cultivar (*Cercis canadensis* 'Forest Pansy') adds purple foliage. Dwarf strawberrytree (*Arbutus unedo* 'Compacta') has grown larger than expected—it's now a 15-foot tree. This southern European native provides glossy evergreen leaves and bears both flowers and strawberry-colored fruit in the fall. Other trees that have thrived include Arizona cypress (*Cupressus arizonica* 'Blue Ice') and *Eucalyptus archeri*.

Shrubs provide an intermediate layer. *Grevillea victoriae* 'Murray Valley Queen', native to Australia, grows four to six feet and offers grey-green narrow leaves and orange winter flowers. Shelagh likes that this cultivar is lower-growing than the straight species.

Rockroses (*Cistus*), Mediterranean natives, lend their sprawling evergreen presence, along with late-spring flowers. Crimson spot rockrose (*Cistus ladanifer*) grows three to four feet high and bears white flowers with crimson spots. A lower-growing plant, sageleaf rockrose (*C. salviifolius* 'Prostratus')—just two feet high by



four feet wide—has white flowers with a yellow spot at the base. *Cistus × skanbergii*, covers a lot of ground (growing two feet high by eight feet wide) and boasts pure-pink flowers.

Shelagh grows *Hebe* species and cultivars from New Zealand for their neat evergreen foliage. For example, the compact *Hebe cupressoides* ‘Boughton Dome’ grows three by three feet. The fine, gray-green foliage gives it the look of a dwarf cypress. When selecting hebes for your garden, consider that larger-leaved varieties are less cold-hardy.

Lomatia myricoides is an evergreen vase-shaped shrub from Australia that grows up to 10 feet tall and sports elliptical, blue-green, jagged-edged leaves. The midsummer flowers are white and sweetly scented.

Common manzanita (*Arctostaphylos manzanita*), native to our West Coast, does well in just about any sunny garden with well-drained soil. Small, white flowers hang on the evergreen foliage in spring. Dark mahogany bark adds

to the appeal. Varieties include ‘Dr. Hurd’ and ‘St. Helena’.

Rosemary (*Rosmarinus*) is a quintessential Mediterranean plant, and the cultivar ‘Arp’ is the one Shelagh finds to be hardy in her garden. ‘Arp’ grows three feet tall and wide. Lavender (*Lavandula*) is another Mediterranean classic you’ll find in the Tucker garden. Shelagh observes that the lavenders look old after about 13 years and need replacing.

Alpine mint bush (*Prostranthera cuneata* ‘Badja Peak’) from Australia provides fine-textured, dark-green foliage with white spring flowers. It grows up to three feet tall and wide. Other successful shrubs include California lilac (*Ceanothus*) and *Ozothamnus leptophyllus*, from New Zealand.

Grasses and grass-like plants add linear texture to the garden and express the movement of the wind. Giant feather grass (*Stipa gigantea*) explodes six feet into the sky like fireworks from a three-foot clump of foliage. The open

TOP: Manzanita forms the backdrop of a summer-dry display featuring euphorbia and *Helleborus x sternii*.
(Photo by Daniel Mount)

OPPOSITE: A gravel path curves through summer-dry shrubs and perennials. (Photo by Phil Wood)

mass of blooms offers a see-through texture. *Calamagrostis × acutiflora* ‘Avalanche’ also grows tall—up to six feet—but is more upright, like an exclamation point. Pheasants-tail grass (*Anemanthele lessoniana*) grows to three feet tall and wide, with arching foliage and a haze of purple summer flowers. Its foliage turns copper in the winter. Leatherleaf sedge (*Carex buchananii*), from New Zealand, stays bronze all year, forming a clump up to three feet tall. Cape restio (*Rhodocoma capensis*) from South Africa makes a bold statement. This reed-like plant features arching stems dripping fine foliage and terminal blooms.

Shelagh has found that perennials in her garden don’t rebloom as well as in an irrigated garden. However, they add both color and texture to her garden compositions. Autumn sage (*Salvia greggii*) from Texas and Mexico blooms all summer and is available in a variety of colors, including purple, red, pink and white. Other valuable perennials include yarrow (*Achillea*), penstemon, phlomis, euphorbia and Russian

sage (*Perovskia*). Species tulips come back, while narcissus do not return.

Beautiful and Beneficial

Within the constraints of our summer-dry region, Shelagh has created a beautiful and meaningful garden. Reducing irrigation preserves wildlife in rivers and wetlands and saves energy used in treating and pumping residential water. Other ecological benefits include eliminating the gasoline, fertilizer and chemical use associated with maintaining a lawn. Summer-dry plants require no added fertilizer, and so produce no harmful runoff. Finally, choosing plants that actually enjoy our summer-dry climate reinforces a sense of place, ensuring a fitting garden for the Pacific Northwest. ☾

PHIL WOOD is the owner of a residential landscape design company (www.philwoodgardens.com) and serves on the Editorial Board of the “Bulletin.”



ROSY DEVELOPMENTS

Disease-Resistant Rose Varieties That Northwest Gardeners Can Love

BY NITA-JO ROUNTREE

Of all the flowers in our gardens, one stands out as being extra special—the rose. I think this is true even in the Pacific Northwest, where the climate can present a challenge to growing many roses. There's just a certain mystique about them. No other flower has been as popular as the rose throughout history.

That said, the popularity of the rose took a bit of a nosedive in recent decades. Too many of the modern varieties—though hardy and beautiful—were susceptible to fungal diseases, and gardeners shifted away from high-maintenance plants that need lots of chemical treatments. Today, however, as breeders focus on developing new, disease-resistant varieties, the rose's popularity is resurging. I discuss some of these varieties below—but first, a little more background on the cultivation of the rose.

Roses in the Ancient World

Roses have been around a lot longer than humans and their rose obsessions. First there were species roses, sometimes referred to as wild roses. It is believed that these originated in Central Asia during the Eocene Epoch, about 30 million years ago. Their flowers have only five petals and appear just once a year. They have thorny stems, and their inherent ruggedness allows them to thrive even in very tough conditions. Wild roses are the worldly wise parents of all our modern-day varieties.

Starting as early as 5000 years ago, various civilizations—including the Egyptians, Chinese, Greeks, Romans and Phoenicians—appreciated roses and cultivated them extensively. They not only grew roses but traded them. Consequently, roses spread rapidly and widely throughout the Middle East and the Mediterranean.

Rosa 'Home Run'
(Photo by Weeks Roses)



We must rely on hearsay and early poets to trace the history of the rose. As British poet and author Walter de la Mare, wrote:

*"Oh, no man knows
Through what wild centuries
Roves back the rose."*

The Greek poet Anacreon, who lived in the fifth century B.C., wrote an early tribute to the rose:

*"The Rose is the perfume of the Gods,
the joy of men,
It adorns the Graces at the blossoming of Love,
It is the favored flower of Venus."*

Aristocrats in ancient Rome had rose gardens at their dwellings, and Roman citizens also enjoyed spending time in public rose gardens—as many as 2000 throughout the empire. One rose legend claims that, around 41 B.C.E., the Egyptian

queen Cleopatra had her bedroom filled with rose petals when Mark Antony met her there, so that he would always be reminded of her every time he smelled a rose.

During the medieval period, monks in Europe grew roses for therapeutic and medicinal purposes, and they developed botanical research centers where they grew *Rosa gallica* var. *officinalis*, also known as the apothecary's rose. Gallicas became famous in English history as the red rose of Lancaster during the War of Roses, a series of wars in England for control of the throne between 1455 and 1487. The opposing faction, the House of York, chose the white rose, *Rosa alba*, as their emblem.

Old Garden Roses

Technically, old garden roses are rose cultivars that were grown before the introduction of the



'Savannah' (Photo by New Flora LLC)



'Poseidon' (Photo by Nita-Jo Rountree)

first modern rose, in 1867—‘La France’, a found rose that is generally accepted as being the first hybrid tea. Old garden roses are the first roses that were cultivated, and they are subdivided into a dizzying array of classes and subclasses. (The major classes include gallica, damask, alba, bourbon and hybrid perpetual teas.) Other terms for these roses include “heritage,” “antique” and “old-fashioned,” but these categories often

include roses that were bred as late as the early 1900s because they were bred from within the old garden rose classes.

The significant breeding of modern times started slowly in Europe, from about the 17th century onward. Roses came to be in such high demand that royalty considered roses or rose water as legal tender, and roses were often used as barter for payments.

Five Great Roses for PNW Gardens

'Savannah'

This is a hybrid tea, a class of modern roses created by hybridizing tea roses with hybrid perpetuals. A hybrid tea is what most people envision when they think about roses: a big, perfectly formed, many-petaled, repeat-blooming, fragrant flower borne singly on top of a long stem. ‘Savannah’ offers wonderfully fragrant, salmon-pink flowers; abundant, dark-green foliage; and exceptional disease resistance, even in heat and humidity. It is a Kordes-bred rose that grows up to three feet tall and wide.

'Poseidon'

This variety is a floribunda, a class of modern roses created by crossing a hybrid tea with a polyantha rose. Floribundas have single- to

double-petal counts, grow in clusters on top of prickly stems, and bloom almost continuously from late spring to the first hard freeze. Named after the Greek god of the sea, ‘Poseidon’ has mauve-lavender, lightly fragrant flowers, and grows up to three feet tall and two-and-a-half feet wide. In Germany, Kordes named this rose ‘Novalis’ after the German poet who used the blue rose as a symbol for love and yearning.

'South Africa'

This one is a grandiflora, a class of roses created in 1954 by crossing a hybrid tea with a floribunda. Grandifloras offer the large, spiraling flower form of a hybrid tea rose, but the flowers are borne in clusters similar to those of floribundas. They are also tall, with some



'South Africa' (Photo by Nita-Jo Rountree)



'Olivia Rose Austin' (Photo by David Austin)

Empress Josephine, Napoleon Bonaparte's wife, played a significant role in popularizing the rose in the early 1800s. She was passionate about roses, and in 1798 she started developing a rose garden at her Malmaison estate, close to Paris. She employed the French horticulturist Andre Dupont to use her collection of roses to create new varieties through an extensive hybridization program. By the time of her death in 1814,

on her 51st birthday, Josephine's collection was the greatest and largest in the world, featuring as many as 250 species and varieties of roses.

The presence of the celebrated rose gardens at Malmaison proved to be beneficial for France, which not only emerged as a leading rose-growing country, but also started exporting large volumes of roses. By 1815, French growers cultivated as many as 2000 rose varieties. This

reaching up to eight feet high. 'South Africa' is a Kordes introduction with fragrant, golden-yellow flowers. It blooms prolifically in flushes throughout the season and grows up to six feet tall and three feet wide.

'Home Run'

This is a shrub rose, which is a sort of catch-all category for rose plants that are low-growing and produce masses of flowers. Most have no fragrance. 'Home Run' is a flame-red offspring of the famous Knock Out roses, but it kicks it up a notch when it comes to disease resistance. It is very fast to cycle-bloom through the season, and its compact habit (28 by 28 inches) makes it a good choice for containers.

'Olivia Rose Austin'

This is a David Austin or English rose, which is technically not a separate class of roses, but

is often regarded as such. David Austin has spent over 60 years crossing old garden roses for their large, multi-petaled, fragrant flowers with modern roses for their repeat-blooming ability and larger color range. He succeeded in his mission, but many of his introductions are susceptible to the same disease problems that plague many modern roses. However, during the last 12 years, disease resistance has moved to the forefront of Austin's breeding efforts. 'Olivia Rose Austin' was introduced in 2016 and named after Austin's granddaughter. It was one of the first to be released from his new breeding program of disease-free lines. The rosette-shaped, pure-pink flowers have a beautiful fragrance. The plant is smaller-growing than typical Austin hybrids, reaching only three feet high and spreading two-and-a-half feet wide. ~

number increased rapidly to 5000 varieties in just another decade.

Modern Roses

The introduction of the repeat-blooming China roses into Europe in the 19th century represented another key moment in rose history. Then, in 1900—after trying for 13 long years—the French breeder Joseph Pernet-Ducher bred the first class of roses that included genes from *Rosa foetida*, which resulted in his introduction of ‘Soleil d’Or’. This brought an entirely new color range for roses: shades of deep yellow, apricot, copper orange and true scarlet. Rose hybridization was truly off and running. Currently, there are more than 30,000 varieties of roses, and more are being developed each day!

Amid the frenzy to breed more and more beautiful roses, however, a problem arose. For decades, breeders concentrated only on hardiness and aesthetic considerations, such as perfect flower form, color and size, which left a lot of these new varieties susceptible to diseases. Home gardeners began to give up on growing roses. This served as a wake-up call for some breeders, most notably Kordes Rosen of Germany, who moved disease resistance to the forefront of their breeding efforts.

Breeding for Resistance

In 1999, Kordes made the bold decision to stop spraying their fields; as a result, they lost a large percentage of their crop. But their experiment in natural selection worked: Some plants survived, and Kordes used these to begin a new breeding program. Other breeders followed suit, and now the rose is making a big comeback. Gardeners are not only focusing on the latest cultivars, but also rediscovering some older, tried-and-true rose varieties that have proven their worth over the test of time.

Here in the Pacific Northwest, our cloudy, rainy climate is an invitation to the two most common rose diseases: black spot and powdery mildew. The former is caused by a parasitic fungus that makes small black spots appear

on the upper surfaces of rose leaves; the latter is also a fungal disease, easily identifiable by the white film it causes to appear on rose leaves and buds. Black spot spores are spread by rain and splashing water, while powdery mildew thrives wherever it’s humid and temperatures are moderate (such as our region in the spring and fall).

Before buying a rose for your Pacific Northwest garden, don’t fall prey to a glamour photo in a catalog, and don’t buy a rose just because it’s named after your mother. Make sure that disease resistance is your first priority. My book, “Growing Roses in the Pacific Northwest,” lists 90 easy-care, no-spray rose varieties, and more are being introduced every year. But remember also that disease resistance only goes as far as good garden sanitation and maintenance practices.

Useful tips include: Raking up all fallen rose foliage and debris in late winter/early spring; fertilizing when leaves first appear and again after the first roses bloom; hosing off aphids if they appear during the growing season; and avoiding overhead watering between 10 a.m. and 4 p.m. to give foliage a chance to dry between natural dew cycles.

Edward Bunyard wrote in “Old Garden Roses,” published in 1936:

It is, surely, in this intimate knowledge that the main pleasure of gardening lies. The wealthy week-end who runs round his country garden and finds it very good, has his reward, but there is a greater joy in store for him who can add a little love and intimacy. On a winter day we can stop before a favourite rose and study its branches and thorns and see, perhaps, some point that escaped us beneath the summer's leaves. ~

NITA-JO ROUNTREE is a Seattle-based garden designer and educator. She is the author of “Growing Roses in the Pacific Northwest: 90 Best Varieties for Successful Rose Gardening” (Sasquatch Books, 2017).

Alangium platanifolium, from China and Japan.
(Photo by Niall Dunne)

The Centennial Summer Garden

Teaming Up to Commemorate the Seattle Garden Club's 100th Anniversary

BY JASON MORSE

For a landscape architect, getting the chance to work in a place like the Washington Park Arboretum is a true honor. Last year, when I was asked by Paige Miller, the executive director of the Arboretum Foundation, whether my firm might be interested in helping to create a grant proposal for a new garden along Azalea Way in the Arboretum, I did not hesitate. She told me the grant was to be made by the Seattle Garden Club to commemorate their 2017 centenary, and that they would be choosing

from among four proposals for compelling landscape projects throughout the city.

Paige had proposed a lovely spot at the north end of Azalea Way Pond, where a big tree had just come down and left an open space at the water's edge. She also suggested a summer-focused plant palette to help bridge the gap between the magnolias, azaleas and cherries of spring and the colorful leaves of autumn.

We prepared a proposal, and I was honored to present our ideas to the members

'Azalea Way' can also be
seen.

of the Seattle Garden Club—along with Sarah Reichard, who lent her knowledge, passion and gravitas to the effort. Several days later we found out that our proposal had been selected for the grant, with the Foundation providing matching funds to help ensure a successful project.

A Working Collaboration

As we began to think about how the design would take shape, I knew that this would be a complicated effort. My past experience at the Arboretum had taught me that this is indeed a kitchen with many, many cooks. The Foundation staff, its Board, members of the Master Plan Implementation Group (MPIG), Seattle Parks and Recreation staff, staff of the University of Washington Botanic Gardens, the Friends of Olmsted Parks, the Seattle Urban Forestry Commission, Iain Robertson from the UW Department of Landscape Architecture and, of course, the members of the Seattle Garden Club

Enkianthus campanulatus ‘Red Bells’,
cultivar of a Japanese species. (Photo by Molbak’s)



itself would each have a say in the design, and, in many cases, have veto power over just about any decision that was made.

In my mind, a design process with this many passionate stakeholders could have three possible outcomes: a watered down effort with no offending elements, but also no character or charm to speak of; a total disaster with one or more of the constituents feeling alienated or disappointed; or a garden that embodied the best of all the expertise, creative energy and passion of each of the participants. As I write this, with the design finished and shovels about to hit the ground, I am pleased, proud, and maybe just a little surprised to report that it seems that the third outcome has been achieved. And I believe that it is because of this diversity of opinions and viewpoints, not in spite of it, that we have arrived at a good result.

Iain Robertson's name was mentioned at the first meeting where this project was discussed. In addition to being a well-respected member of the Landscape Architecture faculty at the University of Washington, Iain is largely responsible for the design of the Arboretum's Witt Winter Garden, which was immediately put forward as the gold standard for a small, display-oriented garden like the one we were beginning to design. I had met Iain once or twice before, and know many people in my field who consider him a mentor, but I had never had the pleasure of working with him or getting to know him well. Iain generously donated his time to collaborate on this project and provide invaluable input. Like all the best practitioners of our craft, Iain offered insights on the integration of plant selection, grading, views, materiality and spatial definition with the overall design concept. I found myself wishing that I had been able to experience having him as a teacher, as so many of my colleagues and friends have. I'm hoping this will not be our last collaboration.

Curation Committee Guidance

As the design process got underway, I was a bit nervous about working with the curation staff at the UW Botanic Gardens. Among my landscape architecture peers, I am considered a bona fide



Stewartia malacodendron, a southeast U.S. native.
(Photo by Richard Bonnett/Wikimedia Commons)

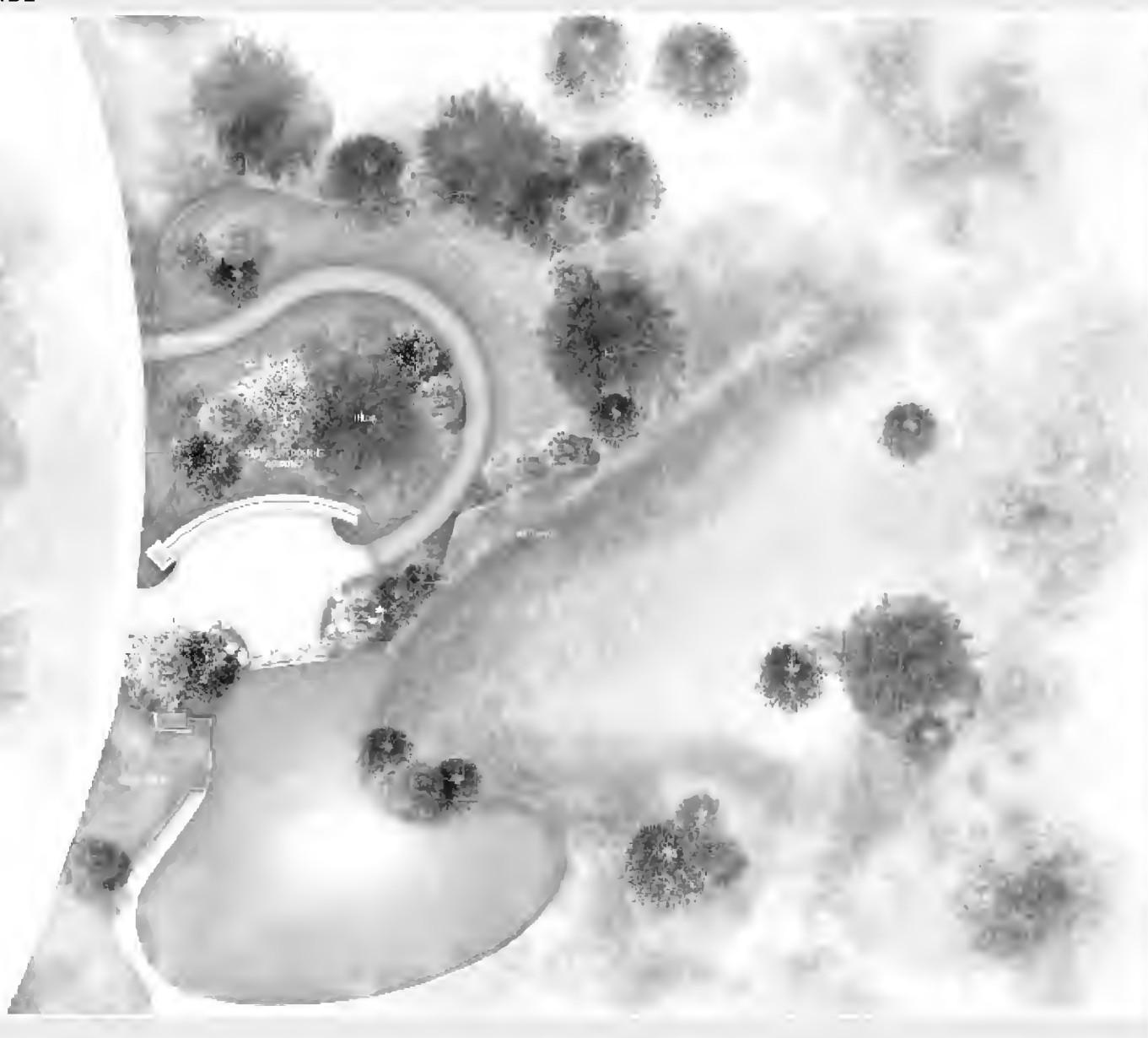
INSET: Site of the future Centennial Garden.
(Photo by Randall Hitchin)

“plant geek,” but it’s a very different experience working with people who have dedicated their careers to studying, caring for, and teaching about plants. And these people manage the plant collection at one of the most revered and well-respected botanical gardens in the world. Would they think me a dilettante, trying to pretty the place up without enough consideration of deeper horticultural themes or the inclusion of enough exotic specimens? Or would they ignore my ideas altogether, preferring instead to hand over a finished plant list and arrangement and expect me to just “draw it up”?

Thankfully, neither scenario came to pass. I showed up to the office of Ray Larson, Curator of the UW Botanic Gardens, with a preliminary plant list and a proposed layout in hand. During that and many subsequent meetings with Ray and other UWBG staff, I had some of the most meaningful conversations about plants of my career. They

raised questions, challenged assumptions, and compelled me to consider every decision more carefully than I might otherwise. For example, we added *Enkianthus* to tie in with the other ericaceous plants in this part of the Arboretum, switched from spring-flowering *Magnolia wilsonii* to *M. virginiana* to extend the summer bloom period, and spaced the plants out farther than normal to allow for these planting beds to look as good in 40 years as they will after two.

The UW staff introduced me to plants I had never heard of, and reminded me to adhere to the highest possible standards of horticultural practice. They were always open and respectful of my ideas, and those of the other stakeholders. Their boss, Fred Hoyt, stood in my corner when I advocated for the project in public meetings. Throughout this process, our interaction has



The Garden Plan

Situated along historic Azalea Way at the north end of Azalea Way Pond, the garden will consist of a wood mulch pathway that meanders through a widely spaced grove of existing cedars, poplars and cherries. The centerpiece of the garden will be a long, curving bench/wall modeled after some historic examples of masonry in other parts of the Arboretum. The bench will offer views across the pond to the historic Overlook gazebo, perched on the hill above. A crushed rock path and terrace area will provide a small gathering space in front of the terrace. At the end of the bench/wall, a stone plinth will house a commemorative plaque to honor the contributions made by the Seattle Garden Club to the Arboretum, which include the funding for the original Olmsted design of the Arboretum and the restoration of the Overlook in 2013.

A large, existing cedar provides a backdrop for the planting design, which celebrates the colors of summer. *Hydrangea* will be the star of the show, with big drifts of *H. macrophylla*, *H. serrata*, *H. quercifolia* and *H. paniculata* cultivars leading the visitor through the garden. Individual specimens of *Magnolia*, *Stewartia* and *Oxydendrum* will help to define the space on either side of the path. Hardy fuchsia, *Calycanthus*, *Olearia* and *Alangium* will round out the flowering shrub layer, with *Sarcococca ruscifolia* and low *Taxus* acting as dark green foils. Sweeping masses of *Hakonechloa* and *Astilbe* will provide foreground at the interior of the garden. From Azalea Way itself, a planting of *Rhododendron* ‘Dreamland’ will provide a tie-in to the swaths of spring color along the historic greenway, and will act as a dark-green background for the mantle of ‘Flower Carpet Amber’ roses that will bloom throughout the summer at the front of the bed. Three memorial benches will be placed along the path in the garden’s interior.

served as a reminder of what an incredibly special place we are working in.

Garden Club Know-How

The members of the Garden Club were no less rigorous. We asked that the Club form a panel at the outset to work directly with the design team and report our progress to the larger group. This panel, led by Jenny Wyatt, took its role very seriously. They also asked a lot of thorough questions, offered great ideas, and demonstrated a love and knowledge of horticulture not often found outside of academic circles. I have looked forward to each of our meetings and know that they will be able to see the direct results of their wisdom, care and enthusiasm in the finished garden.

They have turned out to be collaborators as much as clients, and have contributed far more than money to this project. Yes, I believe that *Epimedium* will perform better than *Liriope* in that situation. No, there is no reason we shouldn't add more hydrangeas to that grouping. And, yes, those *Chamaecyparis* would probably grow tall enough over time to create a blind spot.

I have often wondered whether the Seattle Garden Club has among its ranks some members whose grandmothers helped to hire the Olmsted brothers to draw up the original plans for the Arboretum in 1934. Through their recent gift, and their dedication to the design process, these current members are ensuring that their own grandchildren will be able to walk through the Arboretum and experience their legacy well into the future.

Dedication of Parks Department

Our friends at Seattle Parks and Recreation have also been invaluable collaborators. Andy Scheffer, Michael Shiosaki and Garrett Farrell have shown once again that the way it gets permitted, the way it gets built, and the way it gets taken care of are not just phases of the process but should inform every decision along the way. They display a passion for their work and a dedication to their stewardship of the open spaces they care for that is truly inspiring. As the construction of the garden moves forward, their



Carolina allspice (*Calycanthus floridus* 'Aphrodite'), another Southeast native.

(Photo by Mark Weathington, JC Raulston Arboretum)

role will greatly increase, and we look forward to lots of meaningful collaboration and problem-solving in the months ahead.

Along with my colleagues at AHBL, I have collaborated with or presented before every person or group in that long list of stakeholders above. Each interaction—from presenting to the Friends of Olmsted Parks to meetings with the Garden Club to the muddy site walks with UWBG staff—has provided insight and a reinforcement of my belief that the people involved in this field are some of the most genuine, passionate and conscientious to be found anywhere.

At the beginning of the project, the idea that we would be seeking advice and consent from so many different groups of people seemed daunting at best and potentially disastrous at worst. But with a delicate balance of strong convictions and an open mind, it has been possible to listen, learn and arrive at a far better result than would otherwise have been achieved.

The garden is scheduled to be completed at the end of summer. In the years to come, I will be watching it grow, happy that I was just one of the many people who had a hand in its creation. ~

JASON MORSE is a landscape architect at the design and engineering firm AHBL. He is also a vice president of the Arboretum Foundation Board of Directors.



Hidden Treasures of the Arboretum

Southern Sweetbay

TEXT AND PHOTOS

BY NIALL DUNNE

One of the pleasures of my job as communications manager for the Arboretum Foundation is taking photographs of the plant collection, which we use in our publications and social media. Most of the time during the year, there's plenty of good photographic subject matter—from the cherries, azaleas and rhodies in spring to the wonders of the Witt Winter Garden in the late season.

There is one time of year, however, when the floristic pickings can seem a little bit slim: the heart of summer. (When I worked at Brooklyn Botanic Garden, we would tell visitors that midsummer is the time to enjoy the cooling shade of the lush, green foliage. Translation: Sorry folks, most of the flowering trees and shrubs have already done their thing!) But

there are always summer treasures to find in the Arboretum, if you know where to look. And soon there'll be even more—see the “Centennial Garden,” page 13.

One of my favorite trees to visit in summer is the southern sweetbay, *Magnolia virginiana* var. *australis*. We have two, fine, big specimens along Azalea Way—one almost directly across the trail from the Hybrid Rhododendron Garden, and the other a little farther north, on top of the hill south of the Woodland Garden. From June to mid-July (and sporadically till first frost), the trees bear beautiful, two- to four-inch wide, cup-shaped white flowers with a delicious, lemony fragrance.

Magnolia virginiana var. *australis* is the southern form of the sweet bay or swamp magnolia (*M. virginiana*), which is native to the eastern

INSET: The foliage is green on top and silvery underneath.



U.S., from New York south to Florida and west to eastern Texas. Current taxonomy lumps the two varieties together, but they have some notable differences: Southern sweetbay grows somewhat taller, has more fragrant flowers, and is more likely to be evergreen.

It's easy to make the comparison in the Arboretum. That's because the specimen of southern sweetbay near the rhody garden is flanked on its west side by four specimens of its northern cousin. All the trees have two-toned leaves: glossy, medium green on top, and pale, silvery green on the bottom. The foliage flutters easily when hit by a breeze, creating a shimmering effect.

The northern variety can be a suckering shrub or small tree growing between 15 and 30 feet.

The southern sweet bay can reach 50 feet in cultivation and almost double that in the wild. In the cluster by our rhody garden, the northern trees are all around 25 feet tall, while the southern sweet bay is about 30 feet tall, despite being about 20 years younger than its cousins.

Although both varieties are wetland plants, they're adaptable to drier soil, as long as it's somewhat acidic. The plants also adapt well to full sun or partial shade. After their showy display, the flowers develop into cones of orange-red fruits that are prized by a variety of birds and other wildlife.

Our two southern sweetbays were both received as seed from the University of Illinois Horticulture Department in 1966. The rhody garden tree was planted out in 1978, while the Woodland Garden tree was planted the following year.

Our trees have interesting parentage, says University of Washington Botanic Gardens Curator Ray Larson. The seed came from a cross between trees at Urbana, Illinois and Turtletown, Polk County, Tennessee. According to a letter sent to then Arboretum director Brian Mulligan, the Turtletown trees were reputed to have exceptionally glossy leaves for the species. ~

NIALL DUNNE is the editor of the "Bulletin" and the communications manager at the Arboretum Foundation.



Anna Thomsen Milburn

BY JOHN A. WOTT

EDITORIAL NOTE: *The role of women in the formation and success of the Washington Park Arboretum is well known but perhaps not as well documented. In 2012, Dr. Sarah Reichard developed an interest in the Milburn Memorial Bench, located just north of Rhododendron Glen, and she began to research the woman for whom the bench is named: Anna Thomsen Milburn. As Sarah gathered information, she suggested that an issue of the "Arboretum Bulletin" be devoted to the "women of the Arboretum."*

After some discussion, the Editorial Board decided that instead of a single issue, a series of articles written over time would be more appropriate. Sarah intended to write an article for the series on Mrs. Milburn in late 2016, but—unfortunately—time ran out. Sarah's UW colleagues found the research file that she had put together, and John Wott used it as the basis for the following article.

It is fitting that we dedicate this series to Sarah, the first woman director of the UW Botanic Gardens and a force in Northwest horticulture, conservation and restoration. She found a kindred spirit in Mrs.

Milburn, who was a fellow Arboretum pioneer and an important figure in local and national politics.

If you peruse the historical documentation on the formation of the Washington Park Arboretum, the name of Anna T. Milburn appears. She was one of the 28 signatories of the Articles of Incorporation that established the Arboretum and Botanical Garden Society of the State of Washington on April 15, 1940. She was also elected as a trustee of the society and a member of its executive committee. She was one of our founding mothers, if you will.

Anna was born in Walnut, Iowa, in 1880, to Moritz and Marie Thomsen. Her father, Moritz, was a self-made millionaire who founded Centennial Mills, the largest and longest-lasting flour milling company in Washington. He started the company in Avoca, Iowa, then came to Seattle in 1896 and began dredging up land out of Elliott Bay for a second mill. Eventually, he became

president of 14 corporations, including the Pacific Coast Biscuit Company

Local Engagement

Anna married Henry H. Milburn on June 11, 1902, in King County. The couple had two sons, Moritz and Charles Milburn. In later life, Anna is listed as a widow, although some sources mention a divorce. No mention of her husband was made in her obituary. During World War I, Anna managed the Seattle Canteen for the Red Cross. Her first appointment to public office was to the Seattle Parks Board in 1928, and later, in 1937, she became president of the Seattle Garden Club.

She was a member of the Sunset Club, a private women's club with deep ties to the city's history, and the National Women's Party, an outgrowth of the Congressional Union for Woman Suffrage. She was also one of the leaders in the campaign to reconstruct St. Mark's Cathedral, where the family built the chapel in memory of Anna's sister, Wilhelmina Thomsen.

Anna was very active in advancing women's rights and is cited in several society items in "The New Yorker" in the 1940s. She was active in University of Washington affairs, most notably by protesting the ban on husbands and wives working together, and she participated in the outcry that occurred when Professor Lea Miller, a working wife, was terminated by the UW during the Great Depression, when it was felt that jobs should only be given to men.

She was vocal in her advocacy for equal treatment for married couples, both men and women. In a 1938 article in the "Seattle Post-Intelligencer," she is quoted: "Back of a man stands always the constitution of the U.S., protecting him in his right to the pursuit of life, liberty and happiness. Back of a woman still stands (except in her right to vote) the old common law of Blackstone which said, 'when a man and woman marry they become one and that one is a man.'" She emphasized that a woman is also a person and should be given the same legal rights of a man. She decried the hundreds of discriminations across our county.

National Politics

In 1940, Anna briefly ran a campaign to become president of the United States, representing the Greenback party. "Time Magazine" ran an article on her entitled "National Affairs: Lady Candidate." To quote:

Many things fill the mind, take the time of busy Mrs. Anna Thomsen Milburn of Seattle: gardening, charity work, symphonic music, society women's rights. Says Mrs. Milburn pungently: "Mentality is neither male nor female." But what makes Mrs. Milburn really furrow her brow is money.

Money is an academic subject to wealthy Mrs. Milburn, who is a daughter of the late Moritz Thomsen, west-coast manufacturer, capitalist and head of the Pacific Coast Biscuit Co. But it is an academic subject that fascinates her. There is nothing she loves better than to read a book or give a lecture on the evils of money as it is administered today. According to her sister, Mrs. Frederick Sundt, of Seattle, Mrs. Milburn has it in for Montagu Norman and other bankers and thinks that they, as middlemen, should be eliminated. Four years ago, Mrs. Milburn joined the Greenback Party, which advocates the withdrawal of all gold and silver certificates, substitution of paper money backed not by bullion but by "faith"... This year, when the party decided to put a Presidential candidate in the field, they tapped Mrs. Milburn for the job.

Said Greenback Candidate Milburn, "The objective of science is being frustrated and defeated in its attainment by our present monetary policy."

Anna's campaign didn't last long, however. She withdrew due to objections from family members.

In later years, Anna divided her time between New York and Washington. She died on November 23, 1947, in her Highlands home at age 67. The family then worked through Arboretum director Brian O. Mulligan on the Milburn Memorial Bench, one of the Arboretum's most distinctive hardscape features. The project was

funded by the family and through Mrs. Carl Ballard, who worked with the Seattle Garden Club. A note in the "Arboretum Bulletin" also asked for memorial contributions.

The Memorial Bench

University of Washington Botanic Gardens Curator Ray Larson found considerable correspondence regarding the establishment of the memorial. The cost of the project was roughly \$2600, which included \$150 to the University Cabinet Works for the wooden bench.

The memorial was originally projected for a location near the Garrett Memorial in Rhododendron Glen, but was ultimately moved closer to the upper road, north of the glen. It was to be surrounded by camellias, *Hypericum*, *hebes*, *Hamamelis* and hollies. Construction was completed in fall 1950.

The rock work was installed by Lawrence Korsmo, who apprenticed under Otto Holmdahl. Architect Bert A. Tucker, principal in the firm of

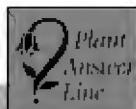


The Milburn Memorial Bench in 1952.

Tucker, Shields and Terry did the design, but certainly Mr. Korsmo used his artistry to make it what it is today.

Truly Anna Thomsen Milburn left her mark on the Arboretum, the city, and the entire country—and is a worthy subject to start off our series on the influential women in the Arboretum. ~

JOHN WOTT is the director emeritus of UW Botanic Gardens and a member of the "Bulletin" Editorial Board.



Q&A from the Miller Library's Plant Answer Line

Caution! Cucurbit Crossing?

BY REBECCA ALEXANDER

This regular column features Q&A selected and adapted from the Elisabeth C. Miller Library's Plant Answer Line program. If you'd like to ask a plant or gardening question of your own, please call (206) 897-5268 (UW Plant), send it via the library website (www.millerlibrary.org), or email directly to hortlib@uw.edu.

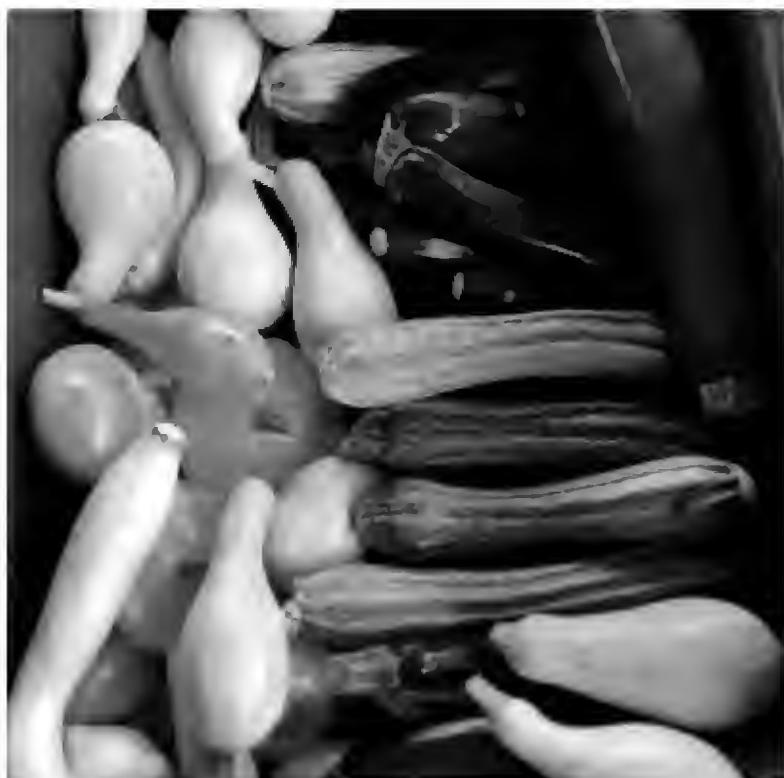
QUESTION: I have a plot in a community garden, with lots of other gardeners and their various crops nearby. I see a strange-looking fruit (like a tiny, rough-textured cantaloupe) where I expected to see a watermelon developing. Can watermelon and cantaloupe cross-pollinate and produce bad-tasting melons? Also, do squash and cucumbers cross-pollinate with melons and create weird (and untasty) hybrids?

ANSWER: The quick and easy answer is no: It is fine to grow watermelons and cantaloupe side by side. Though they belong to the same family, the cucurbits (Cucurbitaceae), watermelon (*Citrullus lanatus* var. *lanatus*) and cantaloupe (*Cucumis melo* ssp. *melo* var. *cantalupo*) cannot cross-pollinate and reproduce with each other because they are

two different species; indeed, they belong to separate genera. Generally speaking, plants that are not in the same species are unable to cross-pollinate. (Now, evolutionary biologists and professional plant breeders might beg to differ—but more on that below.)

The same principle holds true for cantaloupe (*Cucumis melo* ssp. *melo* var. *cantalupo*) and cucumber (*Cucumis sativus*), even though these plants are more closely related than melons and watermelons. So what about the strange-looking fruit? Perhaps it was an interloping cantaloupe. If your vines were planted close together, you might not have realized there was a *Cucumis* developing in among the *Citrullus*. And, if you planted the vines from seed, it's very possible the seed packet contained a surprise cantaloupe!

Below: Squash (left) and watermelon (right) at the UW Farm. (Photos by Sarah Geurkink)



Here's what the Iowa State University Extension has to say about cross-pollination among cucurbit vine crops: "Since they have a similar flowering habit, bloom about the same time, and are members of the same plant family, it is logical that gardeners might assume that squash, melons, and cucumbers will cross-pollinate. Fortunately, however, this is not true. The female flowers of each crop can be fertilized only by pollen from male flowers of the same species. Cross pollination, however, can occur between varieties within a species."

If you are growing several different melon (*Cucumis melo*) varieties together—for instance, cantaloupe, muskmelon, honeydew and Queen Anne's pocket melon—you can end up with hybrid results, especially if you're gardening in a small space. According to Sue Stickland's "Back Garden Seed Saving," commercial seed growers are advised to isolate melon varieties by 500 to 1000 meters, or to bag and hand-pollinate the

flowers to keep unwanted hybridization from happening.

Bear in mind that when varieties of the same species cross, you will not notice immediate changes in the fruit; the cross will be revealed when seeds for the next generation of plants germinate, flower and bear fruit. Now for a more complicated answer to your question! Hybridization between different species does sometimes occur in nature and has actually been an important driving force in flowering plant evolution and speciation. Moreover, work in the realm of plant breeding does show that one can cross two different species—though it helps if they are very closely related. In fact, one British seed purveyor, Marshalls Seeds, has recently bred an interspecific hybrid "squashkin," which is a direct cross between 'Crown Prince' pumpkin (*Cucurbita pepo*) and butternut squash (*Cucurbita moschata*), purportedly with the best qualities of both.

CUKE FAMILY FACTS

Cucurbit reproductive biology

- Most edible crops in this family have monoecious flowers—separate male and female blooms on the same plant—enabling a high degree of cross-pollination (i.e. pollination of a flower or plant with pollen from another flower or plant).
- Some melons are an exception to this, being andromonoecious—having hermaphrodite and male flowers on the same plant; like the monoecious flowers, andromonoecious melon flowers have a high level of cross-pollination, but are also self-compatible and may self-pollinate.
- With vining plants in this family, the climbing and intertwining improves chances of cross-pollination by enabling ease of movement between plants by bees.
- Although it is labor-intensive, pollinating your plants' flowers by hand gives you more control (either to avoid cross-pollination or to cross two varieties intentionally); melon flowers are more fragile than squash blooms,

so you will need a deft and light touch.

- Distinguishing male and female flowers is easy: Female flowers have longer stems than their male counterparts and have a large ovary situated at the base of the flower petals that looks like a miniature version of the fruit that will develop.

Isolation distances:

- If you are growing seed crops of two different cucurbit varieties of the same species, they need to be separated by a mile (if you are saving seed for next year).
• This can be lessened to half a mile if you are using barriers (like hoop houses and isolation cages) between the different varieties when they are flowering.

Washington's native cucurbits:

Echinocystis lobata, found in southeastern Washington

Marah oregana, found mostly in the western half of the state

Agricultural researchers continue to experiment with cross-pollination, grafts and embryo rescue of different species of edible *Cucurbita*. Many of them are using complex breeding tools to overcome the incompatibility barriers that exist between these species. Natural hybridization between closely related species in a garden setting is likely a very rare event, and wide crosses between different genera are exceedingly rare.

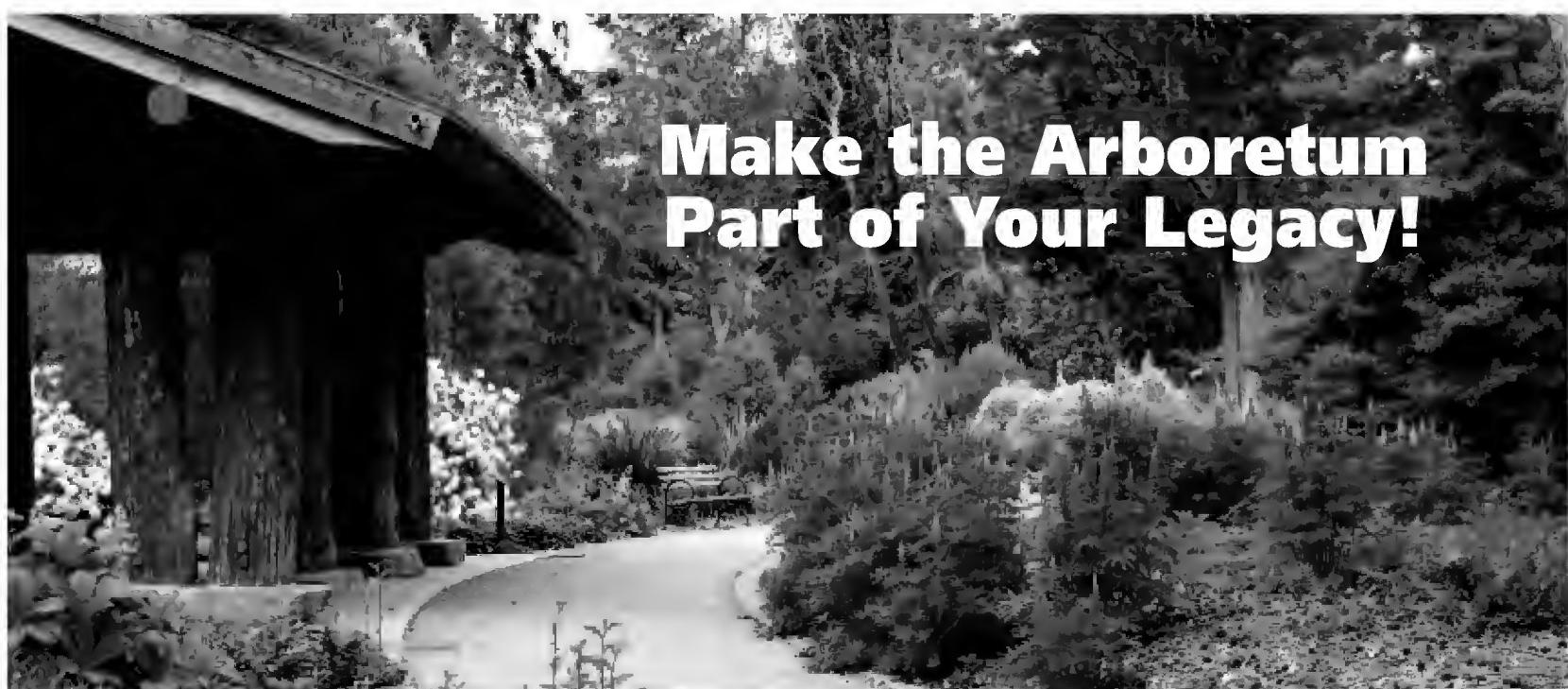
As for bad-tasting (even toxic!) fruits, there are certainly instances of those in the cucurbit family, especially among wild species. The Washington Poison Center has information about instances of “toxic squash syndrome” following consumption of bitter-tasting squash and other cucurbits. Members of the Cucurbitaceae all contain a substance called cucurbitacin that is useful in repelling insect predation, though cucurbit varieties cultivated for human consumption typically have low levels. If there are high enough levels of cucurbitacin (sometimes caused by unstable growing conditions, overripeness, and other factors), you will notice a bitter taste. Cooking does not destroy the toxin, and the outward appearance of the squash provides no clue as to its bitterness. It is prudent to stop eating any cucurbit that is

exceedingly bitter, in order to avoid unpleasant gastrointestinal consequences. ☺

REBECCA ALEXANDER is the Plant Answer Line librarian at the Miller Library, located in the UW Botanic Gardens’ Center for Urban Horticulture (3501 NE 41st Street, Seattle). She is also a contributing editor to the “Bulletin.”

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New Books for Pacific Northwest Gardeners

BY BRIAN R. THOMPSON

Advice from a Long-Time Arboretum Gardener

Gardening books that use a calendar format are especially valuable to newer gardeners, and having one that's tailored to our region is even better. Best of all is having an author who worked in our Arboretum for many years! Christina Pfeiffer brings her considerable experience to "Month-By-Month Gardening: Pacific Northwest" and has consultation help from Mary Robson, a retired Horticulture Extension agent for Washington State University.

The same pair collaborated on a 2005 book, with Robson taking the lead on that publication. This new book begins with a short, but very meaty, introduction chapter covering the basics. The monthly chapters that follow build on the introduction, with topics cleverly positioned when you'll most likely want the advice. For example, in June we learn how to turn an area of lawn into a garden bed—perfectly timed for fall planting.

I appreciate that each month begins with a section on planning. What do you want from your garden? What is working well? What needs changing? Only after you've asked and answered these questions, do you start doing. These activity sections include planting and all

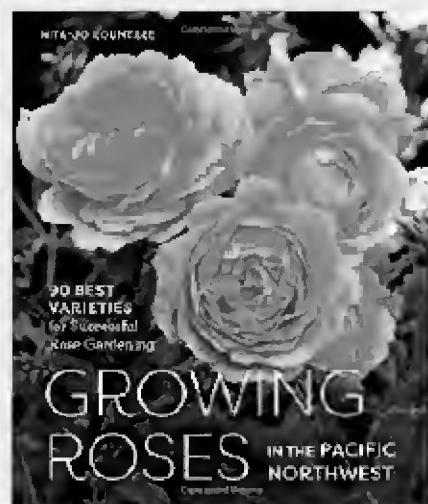
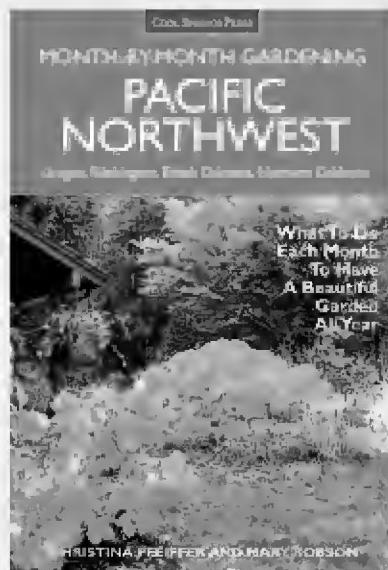
aspects of caring for common garden plants, ranging from annuals to trees. Lawns and houseplants are considered, too.

You are also encouraged to get out to nurseries and plant festivals, and to see our native plants where and when they are at their peak. Enjoying your own and other gardens is important, too. During July, "pause to revel in the beauty and bounty the garden has to offer. This is a time for picnics in the shade and leisurely strolls at local parks and gardens."

Easy Roses for the Pacific Northwest

Nita-Jo Rountree moved to Bellevue, Washington, 15 years ago, after spending many years in Atlanta as a Master Gardener and the owner of a landscape design and installation company. She quickly learned to separate the realities of our Northwest climate from the myths, and she has used this knowledge to specialize in roses, one of her favorite plants—perhaps her very favorite plant. (She's a bit coy on this subject; I know she loves hydrangeas, too).

In her new book, she has chosen an impressive list of roses that do well in our region without a lot of fussing. Many of them are recent introductions that reflect the work of hybridizers



targeting the home gardener, but Rountree doesn't ignore species or historical roses.

I have a passing knowledge of rose varieties, mostly from a brief period of heavy immersion in gardening with roses many years ago. Back then, I learned a lot about the frequent spraying and other chemical rites of rose growing, as this was the expectation in almost every rose book of the time. Today, I only know a handful of Rountree's recommendations. There is a good reason for this: Many of plants she highlights are new varieties that have been bred for disease resistance and don't need the level of coddling I learned. These plants can thus help us avoid potential damage to the garden environment, the wildlife of the garden large and small, and to ourselves.

Rountree is emphatic in her purpose for this book. "Remember: The most important key to successful rose growing is choosing the right rose for the right place. Many books and articles about roses give generic advice for growing roses in a wide range of climates. They are of little specific help for growing roses in the Pacific Northwest."

Foliage First

Karen Chapman and Christina Salwitz are crusaders for garden foliage. "Gardening with Foliage First" is their second book on this topic and greatly expands their 2013 book, "Fine Foliage." Their goal is to be your "personal design coaches," and they tackle that project with great enthusiasm, starting with your choice of leaves. Flowers come later.

The authors have created a long list of vignettes of plant combinations. Some are simple—blending two or three plants—while others are very complex and may include ornaments. The setting can be in a large garden bed or a simple pot. Flowers are allowed, but they must compliment the foliage and be chosen for embellishment. They are not the stars of the show.

The plans all have crazy names. For example, "The Ticklish Porcupine" includes a prickly pear cactus (*Opuntia engelmannii*) surrounded by Mexican feather grass (*Nassella tenuissima*). Why these designs work is carefully explained,

along with general culture tips, but perhaps the best information provided is how each design will change with time. Attention is also drawn to potential problems, such as the invasiveness of the above-mentioned feather grass.

It IS all about You!

Sue Goetz loves to pamper herself. Even more, she wants you to pamper you. How? There is no single answer to this, but in "The Herb Lover's Spa Book" she ardently helps you create your own special place—a personal spa to nurture yourself.

This blissful goal isn't reached without a lot of practical knowledge. The author's experience as a garden designer helps you create a personal sanctuary in your own back yard. Similar principles are applicable to interior spaces, too.

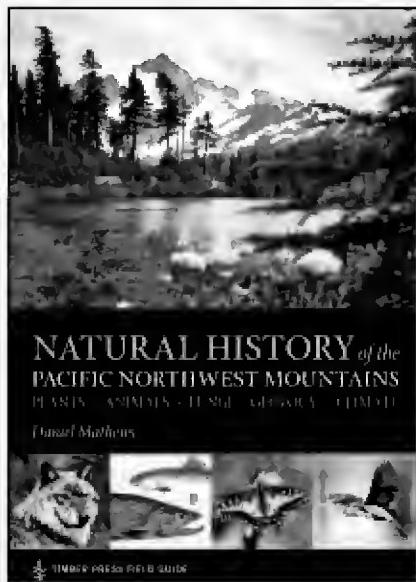
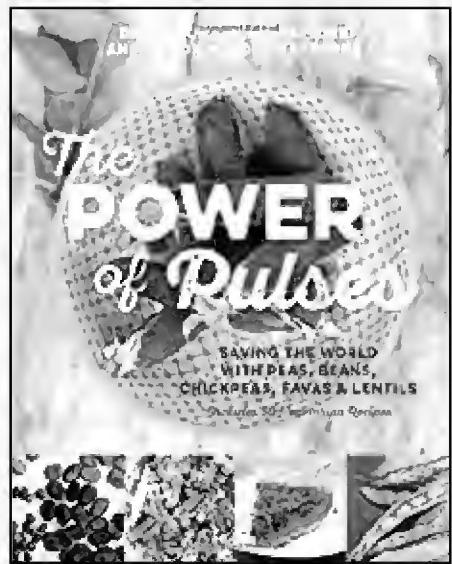
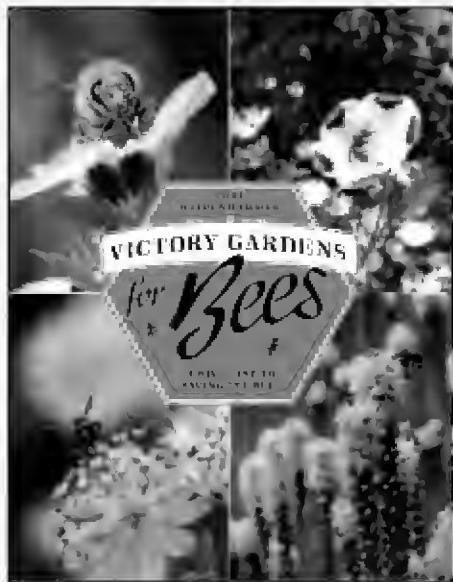
Next, Goetz walks the reader through a concise list of herbal plants, each defined as "...cultivated for its usefulness in flavoring, perfume, or for cosmetic and medicinal uses." Choosing, growing, harvesting and preserving are all part of the lessons.

Finally, you create. Lotions and ointments to make your life a little easier, a little more enjoyable. The recipes are easy, difficult concepts are clearly explained, and there's nothing else to do but try it. As you ease into your fragrance-enriched bathtub of steaming hot water, you'll be glad you did.

Celebrating Bees

Anyone who regularly dresses up as a queen bee to educate children has to be passionate about her topic. Lori Weidenhammer, a performance artist based in Vancouver, British Columbia, is certainly that. That same energy is now available in her book, "Victory Gardens for Bees." The subtitle well describes the book's style: "A DIY Guide to Saving the Bees." Weidenhammer wants you to be engaged!

All this energy may at first distract you from the rich content. This is an excellent introduction and field guide to the many types of bees. Planting charts recommend plants for your gardens—starting with weeds! Each entry tells you which bees are attracted to the plant and what



it provides for them. Planting plans will suggest garden layouts. The photos, mostly by the author, are excellent at showing their small subjects in tremendous detail.

Sometimes you may feel like a child at one of Queen Bee's performances. Suppose you are accidentally stung by a bee. "It hurts a lot and you will feel like unfriending bees. Don't take it personally. Bad stings happen to good people. Once the pain goes away, you'll be ready to forgive and refriend the bees."

Powerful Pulses

When I first heard the title, "The Power of Pulses," I was perplexed as to the subject of the book. The word pulse has many meanings! This is a book better defined by its subtitle: "Saving the World with Peas, Beans, Chickpeas, Favas & Lentils."

To be more precise, a pulse is a legume harvested mainly for the dry seed. The primary author, Dan Jason of Salt Spring Island, British

Columbia, has chosen to concentrate on the five pulses that are the easiest to grow in the temperate climates of Canada and the northern United States.

The subtitle also hints at Jason's proselytizing zeal for growing these plants. Of course, he also sells them through his company, Salt Spring Seeds. But never mind this possible conflict; the book is an excellent introduction to these easy-to-grow, highly nutritious, and earth-friendly foods that require little water and no fertilizer. While generally very positive, the author is not afraid to express his disgust on certain matters, noting "...the common white navy bean has practically no taste and a texture that leaves everything to be desired."

The last part of the book is devoted to 50 vegetarian recipes using pulses and contributed by the co-authors, sisters Hilary Malone and Alison Malone Eathorne of Nanaimo, British Columbia. These tasty-sounding treats take you well beyond

Say What?

A handy feature of "Natural History of the Pacific Northwest Mountains" is the inclusion of pronunciation guides for the scientific name of each plant (and animals, too, but these are less commonly used). Perhaps even more helpful is author Daniel Mathews' essay on pronunciation in the introduction, which makes it clear why there is so much confusion and so many choices in how to articulate a plant's name.

Proper names that have added Latin endings are one example he discusses. "I try, up to a point, to respect the way the person whose name it was would have pronounced it...limiting this principle requires a judgment call based partly on what will roll easily off the tongue. Sometimes the honoree's pronunciation is just too counterintuitive for us."

traditional soups and stews to everything from breakfast to desserts.

Field Guide to Pacific Northwest Mountains

I find field guides fascinating and always enjoy reading new ones. "Natural History of the Pacific Northwest Mountains," by Daniel Mathews, is something of a hybrid between a traditional field guide and a collection of natural history essays. There are enough photos and text descriptions to help you recognize the most common plants, animals, bugs, and even the rocks of our mountains.

A plants-only field guide with detailed keys or multiple photographs for each species will be better for fine-tuning your plant identification. However, having plants and animals in the same, compact guide is handy if the tree or flower you're identifying is occupied by some winged creature: You can just flip to another part of the book to identify it, too. When you are back from your trip to the mountains, the anecdotes and observations interspersed with the identification entries make this book delightful to read from cover to cover.

This isn't exactly a new field guide. Mathews describes it as essentially an expanded and updated third edition of "Cascade-Olympic Natural History," the second edition of which was published in 1999. However, it is new to me, and I found it quite interesting. Unlike in some other all-in-one field guides, plants are not short-changed and—if you include mosses, fungi and lichens—comprise half of the book.

The essays on the trees, shrubs and wildflowers are delightful. For example, the glacier (*Erythronium grandiflorum*) and avalanche (*E. montanum*) lilies "... seem ideal vehicles for those anthropomorphic virtues we love to foist on mountain wildflowers—innocence, bravery, simplicity, perseverance, patient suffering, and so on. They toil not, neither do they spin, and they don't taste half bad either." ~

BRIAN R. THOMPSON is the manager and curator of the Elisabeth C. Miller Library of the University of Washington Botanic Gardens. He is also a member of the "Bulletin" Editorial Board.

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